6:Gt. Brit. Colonial Office G-3 (1948) 1950 MMI Aden
Hadhramaut

the management of irrigation farming on some 5,000 acres. The value of the Board's quarter-share of the net crop obtained, after paying harvesting and threshing expenses in kind, was estimated at over Rs. 1,25,000.

Farming in Abyan, largely influenced by the Board's operations, proved important to the economy of the Western Aden Protectorate. In the production of millet alone, it is estimated that a 30,000 bag crop, equal to 3,000 metric tons, was raised. A large portion of this was held as a reserve, or had been marketed to the easterly districts at the end of the year. General control on the export of this grain to Aden itself was maintained, and the flow of the crop to the districts to the east was encouraged.

The Wadi Hadhramaut Rehabilitation Scheme

This was wound up by Government at the end of the 1947–48 financial year. Farmers with outstanding loans were given ten years in which to repay, the basis of repayment being at the rate of 2 per cent of the total loan from the spring crop, 3 per cent from the autumn crop, and 5 per cent from the winter crop grown. By the end of the year, it was apparent that this system of deferred repayment was not proving satisfactory. Moneylenders had again become active, while late planting and reduced acreage were noticeable in many districts. This undoubtedly resulted from lack of foresight on the part of many farmers, who had failed to reserve sufficient seed and fodder and preferred to resort to moneylenders for obtaining their needs on credit.

At the end of the year, proposals were on hand for the introduction of numbers of diesel-driven irrigation pumps for use in the Wadi Hadhramaut.

Co-operation

The Beihan Farmers' Association, formed in the previous year, progressed in a satisfactory manner, and much useful experience was gained by the officials of the association. A good *saif* season helped the members, but this was followed by an almost complete lack of water in the *kharif*. In spite of these difficulties, the association was able to help its members in their requirements of seed, stock, and cash needed for well equipment and for concentrates for feeding livestock. At the end of the year, the association had acquired some Rs. 12,000 from members' subscriptions and from interest charged on loans.

This association cannot be termed a co-operative society in the true sense of the word. It is an association which has the full support of the local Government, and which at present makes use of Government offices and storehouses for its activities. In the present stage of development this is considered to be the most desirable form of association for Beihan.

Western Aden Protectorate

The Western Aden Protectorate fisheries are of minor importance compared with those of the Eastern Protectorate. Shuqra, the seat of the Fadhli Sultan, is, however, a fishing port with a considerable export trade in dried fish

8:Gt. Brit. Colonial Office G-3 (1951-52)1954 MM1 Aden
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PRODUCTION

ANIMAL HUSBANDRY

Estimate of Livestock in 1952

	Western Protectorate	*Eastern Protectorate*
Camels	35,000	45,000
Cattle	60,000	8,000
Goats	500,000	355,000
Sheep	150,000	50,000
Donkeys	3,500	3,500

Most of the animals are kept by peasant farmers who depend on animal products for an important part of their diet. Away from the less settled areas pastoral, nomadic and semi-nomadic tribes own large numbers of livestock and depend on stock products for food and for sale and barter to obtain other requirements.

Towards the end of 1952 drought conditions affected the production and general condition of livestock. No serious animal disease was recorded during the year.

There is no separate Veterinary Department in the Protectorate but the Director of Agriculture undertakes preventive measures to control important diseases such as rinderpest and horse-sickness.

A herd of Ongole (Nellore) cattle is maintained by the Abyan Board. It is proposed to test the productivity of this breed and the suitability of animals raised locally from the breed for draught purposes in Abyan.

FORESTRY

No true forest exists in the Protectorate. Trees and shrubs common to arid regions in this latitude are found, while a dense growth of Tamarisk and Salvadora is found as "corridor forest" on the sides of the larger flood courses. Acacia is the most important species at all altitudes ; a semi-cultivated species of great value for timber and for honey-gathering bees is the Elb (*Ziziphus spina christi*).

A general dearth of forest products for timber, building materials and for browse for livestock is apparent. In many parts of the Protectorate, and particularly in areas close to Aden, the coastal towns of the Eastern Protectorate, and the Hadhramaut towns, destruction of vegetation for charcoal production and for fuel has devastated large areas. So far no satisfactory measures have been taken to regenerate such areas. Large amounts of capital and firm action by local Governments are needed for this.

CO-OPERATION

The Beihan Farmers' Association, now in its fifth year, continued to benefit the Beihan district. This Association provides its members with seed stocks and grain supplies on credit. At the end of the year the assets were estimated at £14,850 and liabilities at £8,779.

The Audhali-Kaur Farmers' Association has made moderate progress since its formation in 1950. It is primarily concerned with the organisation of vegetable production, transport and marketing for its members who farm with the aid of lift irrigation in the mid-altitude area of the "Audhali-Kaur".

8:Gt. Brit., Colonial Office 3-3 (1951-52)1954 MM1 Aden
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476 The Ahwar Farmers' Association was started with the nomination by the Regent of a chairman and managing committee of 12, assisted by a secretary. The committee functioned during 1952 as a kind of Agricultural Board to deal with local irrigation arrangements, cotton growing and marketing, and development work. It provided a useful link between the Department of Agriculture and the farming community.

FISHERIES

226 The same type of fishing is carried out in the Protectorates as in the Colony with more emphasis on beach seines. The most extensive fishery is the coast from Mukalla eastwards to beyond Qishn. In the winter months sardine of the Sardinella and Dussumreria types are found together with *Scomberomerus spp.* and tunny. The Western Protectorate coast in winter generally supports an intensive fishery for anchovy (*Stolephorus indicus*) by beach seines. In addition a small shrimp is also caught by this method. The fisheries are localised but seasonal fishermen tend to follow the shoals along the coast.

Encircling gill nets, bottom nets and lift nets are little used in the Protectorate as local opinion is strongly opposed to methods of increasing yields for fear that the fish will become extinct.

439 Fishing is financed in the same way as in Colony by merchants.
226 Fish, surplus to normal requirements, is salted and dried for export to
255 India, Africa and Ceylon but there is considerable local consumption
254 inland. Dried sardines are used for camel fodder, tobacco fertiliser and human consumption. One fish factory for canning tunny and sardines, which was established in Mukalla in 1950 and which used an Italian trawler for supplies, has had to close down owing to lack of capital. Fish meal was also produced at this factory. No cold storage or ice-making plants exist.

435 Marketing arrangements are the same as in the Colony : fish prices
226 are about 50 per cent lower for the consumer in the Protectorate.

The sardine fishery which had failed for three years showed signs of revival in the early winter of 1951 along the Eastern Protectorate coast. Shoals of larger fish were also abundant and the upward trend has again been noticed in the winter of 1952.

654 The Fisheries Department is described on page 27. It has surveyed
226 little of the Protectorate waters except by Danish seine netting. The results have been exceptionally poor owing to the rough nature of the bottom. Plans for extensive and intensive work in the Protectorates have been delayed because of schemes in the Colony. A certain amount of work has been done in Western Protectorate waters from Perim to beyond Shuqra but only one area showed signs of promise with Danish seine nets : half a ton of *Lethrinus spp.* was the best single individual haul. The fishermen from Aden Colony range into the Western Protectorate and on three nights at the end of the Shamal of 1952, with assistance from the Fisheries Department vessel, secured 14¼ tons of *Scomberomerus spp.* from the west of Aden. These co-operative efforts will be resumed in the Shamal of 1953.

8:Gt. Brit., Colonial Office G-3 (1951-52)1954 MM1 Aden
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APPENDIX 1

THE ABYAN SCHEME

Purpose

(a) To utilise all surface flow and suitable underground supplies of water in order to develop and maintain irrigation farming in the Abyan district.

(b) To organise and develop the production of food crops and cash crops, and to assist in their marketing.

(c) To increase the wealth and prosperity of the people and the Governments of the local States and of the Protectorate.

Background

The Abyan district is one of ancient development for irrigation farming. Centuries of insecurity made the area derelict, until the settlement of a feud and the entry of H.M. Government to maintain law and order.

From 1941 to 1943 efforts were made to restore, by traditional methods, irrigation of the southern part of the district. In 1943 Government entered the derelict areas of the southern and central sections and a four-year development plan was started to restore and maintain irrigation systems on traditional lines. Control was in the hands of the Department of Agriculture; funds were provided by the Colony of Aden as part of the increased food production campaign; irrigation charges of one-quarter share of the crop were levied.

In 1947 the Abyan Board was formed by an administrative order of the Governor of Aden. The Board was accepted by the two States whose territories were covered by the schemes. In December, 1948, a loan of £20,000 was approved from Colonial Development and Welfare funds. In August, 1948, a further £250,000 was approved. With these funds the Board embarked on the initial stages of its plan of development.

Organisation

Development was on a partnership basis between:

(a) Landowners (the States, private individuals or trusts) who provide land;

(b) owner occupiers and tenant farmers who provide the working animals, implements, general farming capital, and the labour for crop production; and

(c) the Board, a development authority, which undertakes the construction of irrigation works, maintains the irrigation system, and regulates the distribution of irrigation water. The Board also maintains special control over the cotton crop which is sold to the Board at agreed prices, processed in the Board's ginneries, and sold to the Raw Cotton Commission.

Up to 1949–50 agricultural production was primarily concerned with the cultivation of sorghum and sesame. Trials with long-staple